

ABSTRACT OF THE DISCLOSURE

A sputtering target having an annular vault with a throat between two sidewalls and facing a substrate to be sputter coated. The vault is partially closed by a plate placed in the annular throat between the sidewalls. Thereby, the plasma density is increased within the vault.

5 Furthermore, the position of the annular gap in the plate between the two sidewalls may be chosen to increase uniformity of sputtering deposition arising from the two sidewalls. The plate may be formed of one or more annular rings attached to the walls or a single plate having apertures formed therein may bridge the throat. Alternatively, the target may be formed as a cylindrical hollow cathode with the plate partially closing the circular throat. A rotating
10 asymmetric roof magnetron may be combined with a hollow cathode without the restricting plate.